I CLAIM:

1. Integral suspension system for skis, comprising a first substantially rigid plate, a second substantially rigid plate integral with a ski, and a first linkage coupled to the first and second substantially rigid plates, and the first linkage defines a first flexure axis on the first plate and the first linkage defines a second flexure axis on the second plate, and a second linkage coupled to the first and second substantially rigid plates that defines a third flexure axis on the first plate and a fourth flexure axis on the second plate and wherein force on the second plate can compressibly move the second substantially rigid plate relative to the first substantially rigid plate and the first linkage maintains the first flexure axis substantially parallel to the second flexure axis, and the second linkage maintains the third flexure axis substantially parallel to the fourth flexure axis during compression of the second plate thereby attenuating impacts.

2. The Integral suspension system of claim 1 wherein the linkages are panels extending substantially across each of said plates and each panel is flexurally coupled to the first and second plates.

3. The integral suspension system of claim 1 further comprising a plurality of resilient elements located between the first and second plates.

4. The integral suspension system of claim 1 wherein a substantially rigid top plate, a second substantially rigid middle plate, a third substantially rigid ski plate integral with a ski, and a plurality of primary linkages coupled to the first and second substantially rigid plates, and the first linkages define first flexure axes on the first plate and the first linkages define second flexure axes on the second plate and a plurality of secondary linkages coupled to the second and third substantially plates, and the secondary linkages define tertiary flexure axis on the second plate and the secondary linkages define quaternary flexure axes on the third plate wherein force applied to the first and third plates can compressibly move the first, second and third plates relative to each other and the first linkages maintain the first flexure axes substantially parallel to the secondary flexure axes and the secondary linkages maintain the tertiary flexure axes substantially parallel to the quaternary flexure axis during compression thereby attenuating impacts.

5. The integral suspension system of claim 4 wherein said linkages are panels extending substantially transversely across said plates.

6. The integral suspension system of claim 4 wherein said linkages are formed rods.

7. Integral suspension system comprised of a first substantially rigid plate, a second substantially rigid plate, and a plurality of linkages that couple the first substantially rigid plate to the second substantially rigid plate such that compressive forces cause the two plates to move together in substantially similar planer orientation.

8. The integral suspension system of claim 7, further comprising resilient elements located between the first and second plates.

9. The integral suspension system of claim 7 wherein said linkages are panels extending substantially across said plates.

10. The integral suspension system of claim 7 wherein said linkages are formed rods.

11. The integral suspension system of claim 7, further including a third substantially rigid plate integral with a ski, and a plurality of linkages connecting the third plate to the second plate such that compressive forces cause the first and third plates to move together in substantially similar longitudinal and planar orientation.

12. The integral suspension system of claim 11 wherein said plates are of unitary construction with said linkages.

13. The integral suspension system of claim 11 wherein said linkages are panels extending substantially transversely across said plates.

14. The integral suspension system of claim 11 wherein said linkages are formed rods.